# Storm Drain Systems and Illicit Discharges

In modern urban and suburban environments, rainwater and snowmelt, called **stormwater runoff**, is directed to **storm drain systems** to prevent flooding of our roadways. Storm drain systems are designed to redirect this stormwater runoff to local waterbodies through a series of pipes and open drainage ditches.

## **Storm Drain Systems vs Sewer Systems**

A storm drain system is not the same as a sewer system though both consist of a series of pipes located underground beneath our streets. **Sewer systems carry wastewater** from our homes and businesses to a wastewater treatment plant where it is cleaned before being released back into the environment.

**Storm drain systems collect stormwater** from our roads and parking lots to prevent flooding. Stormwater enters the system through inlets called **catch basins**, typically grated structures located in parking lots and on low points on roads. These catch basins are connected to a series of drainage pipes that flow underground to local waterbodies. Though catch basins can filter some debris such as litter and leaves, the water carried through the storm drain system is not treated before discharge.

Pollutants carried in stormwater runoff may include oil, bacteria, sediment, and nutrients such as nitrogen and phosphorus. These pollutants can impact the quality of the waterbody potentially making it unsafe for use.

### **Illicit Discharges**

Storm drain systems are only designed to carry stormwater runoff. As this stormwater is not treated before release back to the environment, it is important that this water is as clean as possible. Though stormwater runoff inevitably carries some pollutants as it flows over roads and parking lots, other pollutants entering the storm drain system are referred to as **illicit discharges**. EPA defines an illicit discharge as any discharge to the storm drain system that is not composed entirely of stormwater. Illicit discharges can include yard waste, sediment, oil, wastewater, and other many other sources.

## **Storm Drain System Management**

The City manages the storm drain system to prevent flooding, to clean the infrastructure as necessary, and to identify and eliminate any illicit discharges to the system to ensure the water leaving the system is as clean as possible.

The City prohibits illicit discharges through its Storm Water Ordinance and may charge a fine to those who illegally discharge to the storm drain system. While the City is responsible for maintaining the storm drain system, it is everyone's responsibility to prevent illicit discharges and to notify the City if you see something that should not be there.



Catch basins carry stormwater directly to nearby waterbodies.



Storm drain systems collect stormwater frm roads and discharge to nearby waterbodies while sewer systems carry wastewater to wastewater treatment plants.

## **Common Illicit Discharges**

- ✓ Yard waste
- √ Sediment/dirt
- ✓ De-icing materials
- ✓ Oil/Gasoline
- ✓ Pet/animal waste
- ✓ Paint/Household chemicals
- √ Fertilizers/Pesticides
- ✓ Failing septic systems
- ✓ Improper RV/Boat waste disposal

#### What is NOT an Illicit Discharge?

- ✓ Landscape irrigation
- ✓ Foundation drains
- ✓ Individual car washing
- ✓ De-chlorinated swimming pool water
- ✓ Firefighting activities
- ✓ Street wash waters